The social change driven by the 4th industrial revolution, the low birth rate, and an aging population are expected to have a significant impact on job change in Korean society. In response to these social changes, it is necessary to innovate the current lifelong vocational education system. The direction of the innovation for the Korean lifelong vocational education system is shifting from delivering knowledge and skills to fostering one's competency to utilize them.

Although the 2015 Revised Curriculum and National Competency Standards (NCS) reflects these changes, the current NCS system is limited to cope with future social change effectively. Thus, this study suggests integrating vocational education and training system and reorganizing the current NCS system. The specific tasks suggested by this study are as follows: increasing the flexibility of NCS through restructuring the current occupational clusters; the integration between core competencies at primary/secondary education levels and NCS' basic job skills: the expansion of NCS into higher education; the integration between NCS in labor market experience and that in lifelong education; and the introduction of the job matching system using artificial intelligence.